Work Orde Wednesday, July		197 49:09 AM									Page 1
Item ID: Revision ID:	D3290-041			Accept					-	art	
Item Name:	Replacement \	Window Assembly				• .			St	top	
Start Date: Required Date: Reference:	7/19/2011 7/26/2011	Start Qty: 6.00 Req'd Qty: 6.00			Cust Item l Customer:	ID:					·
Approvals:	Process Pla	nn:	Date://-07-20	Tooling:		ate:				art	
	QC:		_ Date:	_ SPC (Y/N):	D	ate:				lop	
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Numbe	Insp. er Stamp
Draw Nbr	Rev	ision Nbr									
D3290	DEC	O Rev C1									
		FLOW WATER JET		0.00				<u>_B</u> 11	-8-3		
Waterjet FLOW CNC Waterje	et	Memo 1-Cut as per Dwg Rev:_ Prog Rev:_ 2-Deburr if	4	0.00 or D3290-1)							3

110

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

0.00

B11-8-3

120

QC8- Inspect parts - second check

Memo

Quality Control

Duit Aci	Jopase								
W/O:			V	VORK ORDER CHANGE	S		· · · · · · · · · · · · · · · · · · ·		
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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		esolution:		•					
NCR:		\	WORK OR	DER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
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Work Order ID 72197

Required Date: 7/26/2011

Wednesday, July 20, 2011 7:49:09 AM



Page 2

Item ID:

D3290-041

Accept

Setup Start



Revision ID:

Item Name:

Replacement Window Assembly

Start Date:

7/19/2011

Start Qty: 6.00

Reg'd Qty: 6.00



Date:

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: Date:

Tooling: SPC (Y/N): Date: ____

Date:

Run

Start

Stop

Sequence ID/

Work Center ID

130

HandFinish

Hand Finishing

Operation Description

Chemical Conversion Coat per QSI005 4.1

Set Up/ **Run Hours**

0.00

0.00

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Qty

Number

Stamp

140

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

MUIRUZE

Memo

Memo

START TIME: 4.00 AVOVEN TEMPERATURE: 3701/2 FINISH TIME: 5:30

150

Quality Control

QC3-Inspect Part Finish

Memo

0.00

0.00

Stop

Reject

Reject

Insp.

6 & Muloslow

6X D MA 11/08/08

Dart	Aeros	pace	Ltd
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W/O:			WC	RK ORDER CHANG	ES				
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DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
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Work Order ID 72197

Wednesday, July 20, 2011 7:49:09 AM



Page 3

Item ID:

D3290-041

Accept



Setup Start

Stop



Revision ID:

Item Name:

Replacement Window Assembly

Start Date:

7/19/2011

Start Qty: 6.00

Required Date: 7/26/2011 Req'd Qty: 6.00



Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date:

Date:_____

Tooling:

Date:

Date:

Tool # Plan

Code

Run

Start

Stop

Sequence ID/

Work Center ID

160

Small Fab

Small Fab

Operation Description

Small Fab

Memo

Assemble as per Dwg D3290

QC5- Inspect part completeness to step on W/O

Identify as per dwg & Stock Location: 57 319

Clean D3290-041 and place in plastic wrap

Set Up/

Run Hours

0.00

SPC (Y/N):

0.00

Qty

Accept

Reject Qty

Reject Number

Insp. Stamp

170

Quality Control

Memo

180

Packaging Packaging

Memo

0.00

0.00

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W/O:		100 A	WO	RK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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	R	esolution:	Disposition	n:	QA: N/C CI	osed:		Date: _	
NCR:		,	WORK ORD	ER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action Section			cation	Approval	Approval
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Work Order ID 72197

Wednesday, July 20, 2011 7:49:09 AM



Page 4

Item ID:

D3290-041

Accept



Setup Start



Revision ID:

Item Name:

Replacement Window Assembly

Start Date:

7/19/2011

Start Qty: 6.00

Req'd Qty: 6.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

Stop



Required Date: 7/26/2011

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/

Work Center ID

Operation Description

QC21- Final Inspection - Work Order Release

Set Up/ **Run Hours** **Tool ID**

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

190

Memo

0.00

0.00

Quality Control

	oopaoo					2				
W/O:			W	ORK ORDER CHA	NGES		· · · · · · · · · · · · · · · · · · ·			
DATE	STEP	PRO	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	<u> </u>	PAR #:	Fault Cat	egory:	NCI	R: Yes I	No DQ	A:	Date:	
		esolution:								
NCR:		,	WORK ORE	DER NON-CONFO	RMANCE	(NCR)			
DATE	STEP	Description of NC		Corrective Action	Section B		Verific	cation	Approval	Approval
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<u> </u>										

Picklist Print

Wednesday, July 20, 2011 7:49:16 AM

Work Order ID: 72197

Parent Item:

D3290-041

Parent Item Name:

Replacement Window Assembly



Start Date: 7/19/2011

Required Date: 7/26/2011

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP $B \square 05.05.25 \square Added Step 11 \square KJ/JLM \square$

IPP C□06.05.09□Ecn 798

IPP Rev.D Now on Waterjet 06-06-16 JLM

07.09.28 FC verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased	No			100	sf	211.4456	3.75	23.68421			
061-T6 .063 Sheet										B	11-8-3		
				Location		Loc	Qty	Loc Code				1	
				MAT021		211.44	5684		_			(<u>L</u>)	**
					116308	26.97			_	- 50-			
22127			NI.		117285		84.47	251 6000		17 285			•
2126 	. •	Manufactured	No			160	f	351.6900	6.5	39			-igli
cai				Location		Loc	<u>Qty</u>	Loc Code					11/20
	•			ST405		3	51.69						u e u
					57106		4					. 01	٠
2010(0000)	70.00			Ç	68336	3	47.69		_	% 33	.6842	174	
02126-0780) cut qty (1) at **per kit*** .	t /8.00" as per dwg												
3290-3		Manufactured	No			160	Each	6.0000	1	6			Δ.
J indow													6)
	•			Location		<u>Loc</u>	<u>Qty</u>	Loc Code					1/09/
				ST221			6		_				41 911
·					69556		6		_	6		*	•

Page 1

	1								
W/O:			WO	RK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Categ	jory:	_ NCR: Yes	No DQ	A:	Date: _	
	R	esolution:	Disposition	:	_ QA: N/C CI	osed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCF	3)			
DATE	STEP	Description of NC		Corrective Action Section			ation	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	on C	Chief Eng	QC inspector
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DART AEROSPACE LTD	Work Order:	72197
Description: Window Frame	Part Number:	D3290-1
Inspection Dwg: D3290 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
29.00	+/-0.030	29.00	~		T 301	
14.00	+/-0.030	14.00	8		T	
Ø0.171	+0.005/-0.001	174	7		V HBUZ	
1.50	+/-0.030	1.506	L		V	
1.11	+/-0.030	1.112	>		V	
10.10	+/-0.030	10.10	+		7	
18.50	+/-0.030	18.50	8		7	
0.063	+/-0.010	,061	≥		V	
R3.00	+/-0.030	3,00	R		RG.	
R4.50	+/-0.030	4.50	2		R.G.	٠.
Ø0.257	+0.006/-0.001	. 759	9-		V	
13.61	+/-0.030	13.61	2		T	
· · · · · · · · · · · · · · · · · · ·						

Measured by: B	A	Audited by:	2	Prototype Approval:	N/A
Date: 1(-8-3		Date:	wosla	Date:	N/A

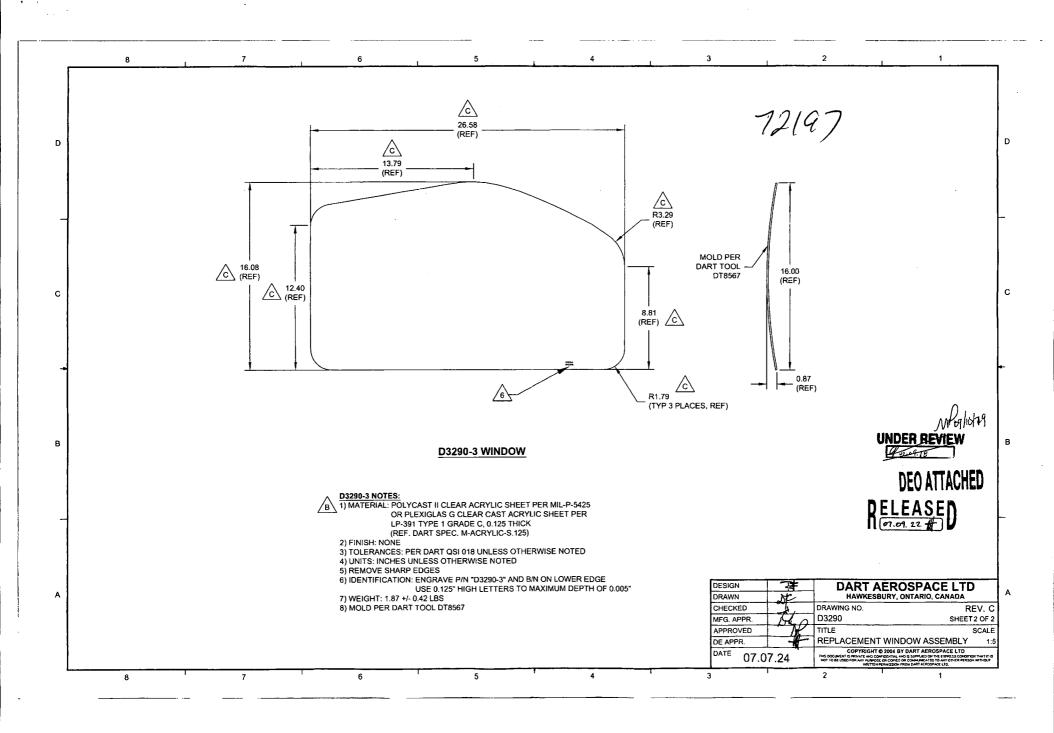
Rev	Date	Change	Revised by	Approved
Α	06.09.19	New Issue P/O D3290-041	KJ/JLM	
В	07.07.18	13.61 dimension removed	KJ/JLM	1 1
С	07.09.28	Dimensions update per Dwg Rev C	KJ/EC/DD	4.4
D	09.11.04	Dimension 0.063 was 0.040	KJ KL	12

W/O:			W	ORK ORDER CHANGI	ES		·-		
DATE	STEP	PRO	PROCEDURE CHANGE						Approval QC inspector
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Part No	:	PAR #:	Fault Cate	egory:	_ NCR: Yes	No DQA	\ :	Date:	
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ENGINEERING UNCONTROLLED CORY SUBJECT TO AMENDMENT Q11-07-20 WITHOUT NOTICE 29.00 WORK ORDER (REF) FWD Ø0.171 14.00 D2126-0780 LOCKING SEAL (TYP 21 PLCS, REF) (REF) INBOARD (TRIM TO FIT) D3290-1 WINDOW FRAME D3290-3 WINDOW R4.50 (REF) Ø0.257 (TYP 12 PLACES, REF) 18.50 13.61 (REF) (REF) 10.10 (REF) 1.10 (TYP) 1.50 1.11 DIST. FROM FRAME (TYP, REF) (TYP, REF) R3.00 EDGE TO WINDOW (TYP 3 PLCS, REF) **D3290-1 FRAME** D2126-0780 LOCKING SEAL D3290-1 NOTES: 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S.040) 5052-H32 ALUMINUM SHEET 0.040 THICK PER AMS-QQ-A-250/8 OR AMS 4016 ENSURE D3290-3 WINDOW IS INSTALLED (REF. DART SPEC. M5052H32S.040) ON CORRECT SIDE OF D3290-1 WINDOW FRAME 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1 POWDER COAT WHITE (REF. 4.5.3.1) PER DART QSI 005 4.3 SECTION A-A 3) BREAK SHARP EDGES: 0.005 TO 0.010 MAX NTS 4) IDENTIFICATION: IDENTIFY WITH DART P/N "D3290-1" USING FINE POINT PERMANENT INK MARKER 5) WEIGHT: 0.47 LBS UPDATE DIMS PER PAR 188 DC 07.07.24 UPDATE MATERIAL PER NCR 029 МВ 06.04.20 В NEW ISSUE RF 04.06.14 Α D3290-041 REPLACEMENT WINDOW ASSEMBLY REV. DESCRIPTION BY DATE DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DESIGN D3290-041 NOTES: DRAWN 1) WEIGHT: 3.66 LBS CHECKED DRAWING NO. REV. C D3290 SHEET 1 OF 2 MFG. APPR. **GENERAL NOTES:** APPROVED TITLE SCALE 1) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED DE APPR. REPLACEMENT WINDOW ASSEMBLY COPYRIGHT © 2004 BY DART AEROSPACE LTD 2) UNITS: INCHES UNLESS OTHERWISE NOTED DATE 07.07.24

SHOP COPY RETURN TO

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W/O:			W	ORK ORDER CHANG	SES					
DATE	STEP	PRO	CEDURE CHA	NGE	E	Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:	Fault Category: NC			NCR: Yes No DQA:			Date: _	
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NCR:		\	WORK ORD	ER NON-CONFORM	ANCE (NCR)				
DATE	STEP	Description of NC	Corrective Action Section E						Approval	Approval
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DRAWING NO	1		REV. C	DART AE	ROSPACE LTD	D.E.O. NO.		SHEET N	0.	SCALE
D3290	REPLACEM	ENT WINDOW AS:	SEMBLY	ENGINE	ERING ORDER	D3290-C-1	_	SHEET 1 C	F j	NTS
DRAWN	q	CHECKED		MFG. APPR.	E.	APPROVED A)	DE APPR.		
DATE	09.09.18	DATE 09.09.1	8	DATE	69.09.18	DATE 09/09/2	1.	DATE 09	09/2	

PURPOSE:

CHANGE MATERIAL THICKNESS OF D3290-1 FRAME TO 0.063 FROM 0.040. REF PAR 09-033.

CHANGE:

MATERIAL CALL-OUT OF D3290-1 FRAME ON SHEET 1 IS AMENDED AS FOLLOWS:

D3290-1 NOTES

1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK 0.063 THICK (REPLACE) PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027

(REF. DART-SPEC. M6061T6S.040) REF. DART SPEC. M6061T6S.063 (REPLACE)

OR

5052-H32 ALUMINUM SHEET 0.040 THICK (REPLACE)

PER AMS-QQ-A-250/8 OR AMS 4016

(REF. DART-SPEC. M5052H32S.040) REF. DART SPEC. M5052H32S.063 (REPLACE)



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WRITTEN PERMISSION FORM DART AEROSPACE LTD.

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W/O:			W	ORK ORDER CHANGES				
DATE	STEP	PF	ANGE	Ву	Date Qt	Approval Chief Eng / Prod Mgr	Approval QC inspector	
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Resolution:			Dispositi	on:	QA: N/C Closed:			
NCR:			WORK OR	DER NON-CONFORMAN	CE (NCF	R)		
		Description of NC		Corrective Action Section B		Verificatio	n Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8	Section C	Chief Eng	QC Inspector
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
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